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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,869	10/04/2005	Toshiyasu Higuma	018760-022	2255

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EXAMINER

RECEK, JASON D

ART UNIT	PAPER NUMBER
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2442

NOTIFICATION DATE	DELIVERY MODE
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12/21/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/529,869	HIGUMA ET AL.	
	Examiner	Art Unit	
	JASON RECEK	2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is in response to the RCE filed on November 22nd 2010.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/10 has been entered.

Status of Claims

Claims 12-16 have been cancelled. Claims 1-3 and 5-11 are pending, of which claim 1 is currently amended.

Response to Arguments

2. Applicant's arguments, see pg. 11-13, with respect to the rejection(s) of claim(s) 1 under 103 have been fully considered and are persuasive. Specifically, the argument (Pg. 13) that Howard does not disclose prohibiting access to the communication

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network is persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kelly et al. US 2005/0005167.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3 and 5-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites several "means" limitations (i.e. "communication control means", "apparatus communication managing means", and "apparatus interface means") thereby invoking 112, paragraph six. For a computer-implemented means-plus-function claim limitation that invokes 35 U.S.C. 112, sixth paragraph, the corresponding structure is required to be more than simply a general purpose computer or microprocessor. The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer or microprocessor. The written description of the specification must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the disclosed algorithm that performs the claimed function. Applicant may express the algorithm in any understandable terms including as a mathematical formula, in prose, in a flow chart, or in any other manner that provides sufficient structure (see MPEP 2181).

In the present case, no corresponding algorithm is disclosed. Therefore the means limitations render the claim indefinite.

Claims 2-3 and 5-11 do not cure this deficiency and thus are also rejected based on upon their dependency.

Claims 2-3, 5 and 9 recite further means limitations (i.e. “power supply managing means” – claims 2-3, “installation information managing means”, “network attribute / band managing means” – claim 5, and “abnormality notifying means” – claim 9). There are no corresponding algorithms for these means either. Therefore, these claims are also rejected for the same reason as claim 1.

Claims 2-3 recite the limitation "the power supply managing means" in line two. There is insufficient antecedent basis for this limitation in the claim (this term was deleted from claim 1 and no longer has antecedent basis).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard et al. US 6,728,804 B1 in view of Kelly et al. US 2005/005167 A1.

Regarding claim 1, Howard discloses “A communication adapter (col. 3 ln. 40-42, Fig. 1), “communication control means” computer program routines that handle communications (col. 4 ln. 64-67), “communication managing means that copies and saves the apparatus object” as an adapter with memory (col. 3 ln. 45-47, Fig. 1 item 24), “makes it possible to use the connection object apparatus from the network” (col. 2 ln. 39-44), and “apparatus interface means” as a communication port that enables communication with the devices (col. 3 ln. 54-56),

“apparatus interface access unit that interfaces with the apparatus interface means according to a procedure common to the connection object apparatuses” as a port or module both interface with control means (Fig. 1 items 26, 28, col. 4 ln. 64 - col. 5 ln. 3),

“apparatus control access unit that interfaces with the communication control means according to the common procedure” the adapter communications module and the network communications module (Fig. 2 items 58, 60) both interface with control means, these elements “control access” because Howard teaches they “handle the communications” (col. 4 ln. 64 – col. 5 ln. 3), one of ordinary skill in the art would understand that handling communications is equivalent to controlling,

“first access control means that permits ... access to the apparatus interface access unit” these modules (Fig. 2 items 58, 60) allow access to the interfaces since they handle communications (col. 4 ln. 64—col. 5 ln. 3), “based on an operation of the communication control means” software executed by the processor and memory (col. 3 ln. 40-45), and

“second access control means that permits ... access to the apparatus control access unit from the communication control means based on an operation ... via the apparatus interface means” as a device interface main (Fig. 2 item 62, col. 5 ln. 7-14) that contains software to manage the communications based on receiving messages from the interfaces (operation of the apparatus interface means).

Howard does not explicitly disclose the control means "prohibits access ... based on an operation of the apparatus object" however this is taught by Kelly as denying a request / preventing access based on information or location of a device (paragraph 103). Thus, Kelly teaches prohibiting access based on an operation of the apparatus object because it uses information of the machine to control access. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Howard with the access prevention taught by Howard for the purpose of controlling communications. Howard teaches controlling communications (col. 4 ln. 64 – col. 5 ln. 3), it just does not explicitly teach prohibiting access. Prohibiting access is well known in the art (i.e. firewall, login, authentication, etc.), Kelly further teaches that access may be denied based on certain conditions. Thus, this is merely the combination of a known element according to its established function in order to yield a predictable result.

Regarding claim 5, Howard discloses “object managing means” as the apparatus understands object-oriented program code (col. 5 ln. 50-58), “state acquisition procedure setting means” as variables that may be set according to the state of a

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device such as light on (col. 5 ln. 59-67), "installation information managing means" as providing new program code when a new device is identified (col. 6 ln. 30-42), "network attribute managing means" as an adapter that is capable of communication on a network must have the necessary means to manage that communication (col. 3 ln. 58-62), and "network band managing means" as a communication module that handles network communication (col. 5 ln. 1-3).

Regarding claim 6, Howard discloses "generates an imaginary apparatus object on the basis of a setting command" as the adapter can create an object to represent a device (col. 6 ln. 1-14), it is not necessary that the device be connected before the object is created.

Regarding claim 7, Howard discloses "the apparatus communication managing means ... performs operation and setting for this imaginary apparatus and acquisition of a state" as the adapter controls the object and thus is able to perform state acquisition and setting of variables (col. 5 ln. 59-62), and "performs setting for running and stop of the apparatus object and acquisition of a state" as controlling the object (col. 6 ln. 5-14).

Regarding claim 8, Howard discloses "a database that holds installation information" as memory (col. 3 ln. 42) that holds database information (col. 5 ln. 40-41), "writing/reading means" are also disclosed (col. 7 ln. 37-39).

Regarding claim 9, Howard discloses “abnormality notifying means” as a monitor function that provides monitoring information to the network (col. 7 ln. 2-4, 42-45).

Regarding claim 10, Howard does not explicitly disclose “provides the connection object apparatuses with the abnormality information when data transmission through the network is impossible” however it would have been obvious to one of ordinary skill in the art at the time of the invention that if one line of communication is not in use (i.e., the network), another line of communication should be tried.

7. Claims 2-3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard and Kelly in view of Van der Meulen US 6,906,617 B1.

Regarding claim 2, Howard and Kelly do not explicitly disclose “power supply managing means” however this is taught by Van der Meulen as a power supply managing means that manages a state of power (col. 3 ln. 32-49, Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Howard and Kelly by providing power management as taught by Van der Meulen for the purpose of automation. Van der Meulen teaches that monitoring power provides a user with greater control over the appliances that are connected (col. 2 ln. 1-17).

The combination of Howard and Kelly also does not disclose “manages a charged capacity inside an adapter” or “the communication control means to limit

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communication according to a management state of the power supply managing means” however these are taught by Van der Meulen as a power supply managing means (col. 3 ln. 32-49, Fig. 2) and communicating only during certain periods (col. 3 ln. 60-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Howard and Kelley by providing power management as taught by Van der Meulen for the purpose of automation. Van der Meulen teaches that monitoring power provides a user with greater control over the appliances that are connected (col. 2 ln. 1-17).

Regarding claim 3, the combination of Howard and Kelly does not explicitly disclose “the apparatus communication managing means to limit accesses to the apparatus object according to a management state of the power supply” however this is taught by Van der Meulen as a system which only communicates during certain power states (col. 5 ln. 12-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Howard and Kelly by providing power management as taught by Van der Meulen for the purpose of automation. Van der Meulen teaches that monitoring power provides a user with greater control over the appliances that are connected (col. 2 ln. 1-17).

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Regarding claim 11, it is a combination of claims 1 and 2, therefore it is rejected for similar reasons.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Segal US 6,347,338 B1 discloses access control including denying connections (abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON RECEK whose telephone number is (571)270-1975. The examiner can normally be reached on Mon - Fri 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Recek/
Examiner, Art Unit 2442
(571) 270-1975